

OUPES Mega 2 (S2)

OUPES Mega 2 Solar Generator

USER MANUAL

1. Introduction

Welcome to the OUPES Mega 2 Solar Generator user manual. This comprehensive guide provides essential information for the safe and efficient operation, maintenance, and troubleshooting of your OUPES Mega 2 portable power station and accompanying 240W solar panels. The OUPES Mega 2 is a versatile 2048Wh LiFePO4 battery solar-powered generator designed for various applications, including home emergency backup, RV use, and both in-grid and off-grid scenarios. Please read this manual thoroughly before using the product to ensure optimal performance and longevity.

2. Safety Instructions

Adhering to these safety guidelines is crucial for preventing injury, electric shock, fire, and damage to the unit. Always keep this manual accessible for future reference.

- Do not disassemble, repair, or modify the unit. Incorrect reassembly may cause fire or electric shock.
- Do not place the unit near fire or expose it to heat. Keep out of direct sunlight.
- Do not charge, use, or store the unit in a bathroom or in an area exposed to water or humidity.
- Use only the provided or approved accessories.
- Do not use the unit if it is damaged or has been dropped.
- Keep the unit out of reach of children and pets.
- Ensure proper ventilation during use to prevent overheating.
- Avoid short-circuiting the unit.
- Do not insert foreign objects into the ports or openings.
- Dispose of the unit and its battery in accordance with local regulations.

3. Package Contents

Upon unpacking, please verify that all items listed below are included and in good condition:

- 1x OUPES MEGA 2 2500W Power Station
- 2x 240W Solar Panels
- 1x AC Charging Cable
- 1x Anderson to Anderson Cable
- 1x 7909 to Anderson Charging Cable
- 1x Car to Anderson Charging Cable
- 1x MC4 to Anderson Charging Cable
- 1x User Manual
- 1x Warranty Card

4. Product Overview

The OUPES Mega 2 is a high-capacity portable power station featuring a durable LiFePO4 battery, offering over 3500 cycles at 80% capacity for extended longevity. It provides 2048Wh of power with a continuous 2500W pure sine wave output, capable of powering up to 16 devices simultaneously. The system is expandable from 2kWh to 10kWh with additional batteries, providing flexible energy solutions. It supports ultra-fast charging, reaching full capacity in just 36 minutes with combined AC and solar input.



Figure 4.1: OUPES Mega 2 Solar Generator and included solar panels.

Key Features:

- **Long-lasting LiFePO4 Battery:** Ensures over 3500 cycles at 80% capacity, providing more than 10 years of reliable power.
- **Expandable Capacity:** Easily expand from 2kWh up to 10kWh with additional batteries (sold separately) for increased power needs.
- **Multiple Outputs:** Equipped with 5 AC outlets (2500W continuous), USB-A, USB-C (PD 100W), 12V/30A Anderson, 12V/10A DC5521, and 12V/10A Car output ports, supporting up to 16 devices simultaneously.
- **Fast Charging:** Achieve a full charge in just 36 minutes with combined 2100W solar input and 1600W AC input, or 1.3 hours with AC charging alone.
- **Smart App Control:** Monitor and control your power station remotely via a dedicated mobile application.

15 OUTPUTS FOR ALL YOUR GEAR



Anderson Output Port
12V/30A



Type-C Output Ports
PD 100W



USB-A Output Ports
18W Max



AC Output Ports
120V/20A



Car Output Port
12V/10A



5.5mm DC Output Ports
12V/10A



AC TT-30 Output Port
120V/30A



LCD Display

Figure 4.2: Front panel of the OUPES Mega 2, highlighting the 15 output ports for various devices.

SMART APP CONTROL



GET IT ON
Google Play



Download on the
App Store



Figure 4.3: The OUPES Mega 2 can be controlled and monitored via a smartphone app, as shown on the screen.

Faster Charging within 36 mins



1600w
AC Charging
1.3 Hours



2100w
Solar Panel
1.0 Hours



3700w
AC + Solar
0.6 Hours



*Based on using 1000W solar input in an ideal environment.

Figure 4.4: Illustration of the fast charging capabilities of the OUPES Mega 2, showing 1600W AC, 2100W Solar, and 3700W AC+Solar charging times.

5. Setup

5.1 Connecting Solar Panels to Mega Series

This video demonstrates the process of connecting OUPES solar panels to your OUPES Mega Series power station using the provided MC4 to Anderson cable. It covers the steps for single panel connection.

Your browser does not support the video tag.

Video 5.1: Instructions on how to connect OUPES solar panels to the Mega Series power station.

5.2 Connecting Multiple Solar Panels in Series

Learn how to connect multiple OUPES solar panels in series to maximize your solar input. This video provides a step-by-step guide for setting up a series connection for increased charging efficiency.

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Video 5.2: Guide on connecting multiple OUPES solar panels in a series configuration.

6. Operating Instructions

6.1 Setting Charging Speed (High/Low)

This video demonstrates how to adjust the charging speed of your OUPES Mega 2 power station between high and low settings. This feature allows you to optimize charging based on your needs and available power source.

Your browser does not support the video tag.

Video 6.1: Instructions for setting the high or low charging speed on your OUPES Mega 2.

6.2 General Operation

- **Power On/Off:** Press and hold the main power button for a few seconds to turn the unit on or off.
- **AC Output:** Press the AC button to enable or disable the AC outlets. Ensure your devices do not exceed the 2500W continuous output.
- **DC Output:** Press the DC button to enable or disable the DC and USB ports.
- **Charging the Unit:** Connect the power station to an AC wall outlet, solar panels, or a car charger using the appropriate cables. The LCD display will show the charging status.
- **LCD Display:** The display provides real-time information on battery level, input/output wattage, remaining runtime, and active ports.
- **App Control:** Download the OUPES app from your smartphone's app store to remotely monitor and control the power station, including setting charging speeds and viewing detailed statistics.

7. Maintenance

Proper maintenance ensures the longevity and optimal performance of your OUPES Mega 2 Solar Generator.

- **Cleaning:** Use a dry, soft cloth to wipe the exterior of the unit. Do not use abrasive cleaners or solvents.
- **Storage:** Store the unit in a cool, dry place away from direct sunlight and extreme temperatures. For long-term storage, charge the battery to 50-80% every 3-6 months to maintain battery health.
- **Battery Care:** Avoid fully discharging the battery frequently. While LiFePO4 batteries are robust, maintaining a charge above 20% when possible can extend overall lifespan.
- **Ventilation:** Ensure the ventilation vents are clear of dust and debris to prevent overheating.

8. Troubleshooting

If you encounter issues with your OUPES Mega 2, please refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Unit does not power on.	Battery is completely discharged; Power button not pressed long enough.	Charge the unit using AC or solar; Press and hold the power button for 3-5 seconds.
AC outlets not working.	AC output not enabled; Overload protection activated; Battery too low.	Press the AC button to enable; Reduce connected load; Recharge the unit.
Solar charging is slow or not working.	Insufficient sunlight; Panels not properly connected; Panels are dirty.	Ensure panels are in direct sunlight; Check all cable connections; Clean solar panels.
Unit is overheating.	Poor ventilation; Excessive load.	Ensure vents are clear; Reduce connected load; Move to a cooler environment.

If the problem persists after attempting these solutions, please contact OUPES customer support for assistance.

9. Specifications

Feature	Detail
Brand	OUPES
Model Name	Mega 2 (S2)
Battery Type	LiFePO4
Capacity	2048 Watt-hours (Wh)
Output Wattage	2500W (Continuous)
Surge Output	5400W
AC Voltage	120 Volts (AC)
Solar Input	Up to 2100W
AC Charging Input	Up to 1600W
Charging Time (AC+Solar)	0-100% in 36 minutes

Feature	Detail
Charging Time (AC Only)	0-100% in 1.3 hours
Expandable Capacity	Up to 10.24kWh with extra batteries
Item Weight	55 Pounds
Product Dimensions	30.7"L x 17.72"W x 19.69"H
Total Power Outlets	12 (various types)
UPS Function	Yes, with <20ms switching time

10. Warranty and Support

The OUPES Mega 2 Solar Generator comes with a **3-year warranty** from the date of purchase, covering defects in materials and workmanship under normal use. Please retain your proof of purchase for warranty claims.


For technical support, warranty inquiries, or any questions regarding your OUPES product, please contact our customer service team:

- **Email:** support@oupes.com
- **Phone:** 1-800-XXX-XXXX
- **Website:** www.oupes.com

Our dedicated support team is available to assist you with any issues or questions you may have.

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Related Documents - Mega 2 (S2)

<div><p>OUPES</p><p>2500W PORTABLE POWER STATION</p><p>MEGA2</p><p>User Manual</p></div>	<p>OUPES Mega 2 2500W Portable Power Station User Manual</p> <p>Comprehensive user manual for the OUPES Mega 2 2500W portable power station, covering setup, operation, charging methods, troubleshooting, and maintenance.</p>
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 <p>OU PES 2500W PORTABLE POWER STATION</p> <p>MEGA 2 User Manual</p>	<p>OU PES MEGA 2 2500W Portable Power Station User Manual</p> <p>Comprehensive user manual for the OU PES MEGA 2 2500W Portable Power Station. Learn about its specifications, functions, charging methods, troubleshooting, and maintenance for reliable off-grid power.</p>
 <p>OU PES 2000W Outdoor Power Station</p> <p>MEGA 1 User Manual</p>	<p>OU PES 2000W Outdoor Power Station MEGA 1 User Manual</p> <p>Comprehensive user manual for the OU PES 2000W Outdoor Power Station MEGA 1, detailing specifications, operation, charging methods, troubleshooting, and maintenance for optimal use.</p>
 <p>OU PES 3600W PORTABLE POWER STATION</p> <p>MEGA 3 User Manual</p>	<p>OU PES Mega 3 Portable Power Station User Manual 3600W 3072Wh</p> <p>Comprehensive user manual for the OU PES Mega 3 Home Backup & Portable Power Station. Learn how to safely operate, charge, and maintain your 3600W, 3072Wh power station for reliable backup power.</p>
 <p>OU PES 3600W Portable Power Station</p> <p>Mega 3 User Manual</p>	<p>OU PES Mega 3 Portable Power Station User Manual</p> <p>Comprehensive user manual for the OU PES Mega 3 3600W Portable Power Station, covering safety instructions, product specifications, operation, charging methods, troubleshooting, and compliance.</p>
 <p>OU PES SMART EXTRA BATTERY</p> <p>2048Wh User Manual</p>	<p>OU PES OPS-S2-BAT Portable Power Station User Manual</p> <p>Comprehensive user manual for the OU PES OPS-S2-BAT portable power station, detailing setup, operation, safety, and maintenance for reliable backup power.</p>